OIPE 19 2003
Docket 44. SYB/0089.01

the date shown below.

Typed or printed name

Signature

John A. Smart

Cp# 2171

Phone: 408 884 1507

Date

Fax: 408 490 2853

12/22/2003

PTO/SB/21 (05-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE der the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/600,932 TRANSMITTAL Filing Date June 20, 2003 **FORM** First Named Inventor Nica Art Unit 2171 (to be used for all correspondence after initial filing) **Examiner Name** Unassigned Attorney Docket Number SYB/0089.01 227 Total Number of Pages in This Submission

	ENCLOSURES (Check all that apply)					
	Fee Transmittal Form	Drawing(s) After Allowance communication to Group				
	Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53	Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address Terminal Disclaimer Request for Refund CD, Number of CD(s) Remarks This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in Sec. 1.56. Copies of references are enclosed.				
	SIGNA	TURE OF APPLICANT, ATTORNEY, OR AGENT				
Firm or Individ Signat	John A. Smart	Digitally signed by late 1 Smart Smart 2003 12 22 444 face of smart				
	December 22, 200					
	C	ERTIFICATE OF TRANSMISSION/MAILING				
I heret	I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on					

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-00)

Please type a plus sign (+) inside this box

+

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 Of 2	SHEEL I I	of 2	
--------------	-----------	------	--

Olig to a collection of imprinted in anicos it contains a valle of the				
C mpl te if Known				
Application Number	10/600,932			
Filing Date	June 20, 2003			
First Named Inventor	Nica			
Group Art Unit	2171			
Examiner Name	Unassigned			
Attorney Docket Number	SYB/0089.01			

	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		STEINEBRUNN, M. ET AL, Heuristic and Randomized Optimization for the Join Ordering Problem, VLDB Journal, Vol. 6: 191-208, 1997	į			
		VANCE, B. ET AL, Rapid Bushy Join-Order Optimization with Cartesian Products, Proceedings of ACM SIGMOD Conference of Management of Data, pp 35-46, June 1996				
		CLUET, S. ET AL, On the Complexity of Generating Optimal Left-Deep Processing Trees with Cross Products, Proceedings of the Fifth International Conference on Database Theory, pp 54-67, January 1995				
	e	GALINDO-LEGARIA, C., Uniformly-Distributed Random Generation of Join Orders, Proceedings of the International Conference on Database Theory, pp. 280-293, January 1995				
		GALINDO-LEGARIA, C. ET AL, Fast, Randomized Join-order Selection - Why Use Transformations?, Proceedings of the International Conference on Very Large Data Bases, pp. 85-95, September 1994				
	ė	SWAMI, A. ET AL, A Polynomial Time Algorithm for Optimizing Join Queries, Proceedings of the IEEE Conference of Data Engineering, pp 345-354, April 1993				
		ONO, K. ET AL, Measuring the Complexity of Join Enumeration in Query Optimization, Proceedings of the 16th International Conference on Very Large Data Bases, pp. 314-325, August 1990				
		IOANNIDIS, Y.E. ET AL, Randomized Algorithms for Optimizing Large Join Queries, Proceedings of ACM SIGMOD Conference of Management of Data, pp 312-321, April 1990				
	,	SWAMI, A., Optimization of Large Join Queries: Combining Heuristics and Combinatorial Techniques, Proceedings of ACM SIGMOD Conference of Management of Data, pp 367-376, May 1989				
		SWAMI, A. ET AL, Optimization of Large Join Queries, Proceedings of ACM SIGMOD Conference of Management of Data, pp 8-17, May 1988				
	i I	IOANNIDIS, Y.E. ET AL, Query Optimization by Simulated Annealing, Proceedings of ACM SIGMOD Conference of Management of Data, pp 9-22, May 1987				

Examiner	Date	
Signature	Considered	The second secon

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box

PTO/SB/08B (08-00)
Please type a plus sign (+) inside this box

+

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complet if Known **Application Number** 10/600,932 Filing Date June 20, 2003 Nica **First Named Inventor** Group Art Unit 2171 Unassigned **Examiner Name**

SYB/0089.01

(use as many sheets as necessary)

of Attorney Docket Number Sheet

	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²			
		KRISHNAMURTHY, R. ET AL, Optimization of Non-recursive Queries, Proceedings of the 12th International Conference on Very Large Data Bases, pp. 128-137, August 1986				
		IBARAKI, T. ET AL, On the Optimal Nesting Order for Computing N-Relational Joins, ACM Transaction on Database Systems, Vol 9: pp. 482-502, September 1984				
		SELINGER, P.G. ET AL, Access Path Selection in a Relational Database Management System, Proceedings of ACM SIGMOD Conference of Management of Data, pp 23-34, May 1979				
		WONG, E. ET AL, Decomposition - a Strategy for Query Processing, ACM Transaction on Database Systems, 1(3): pp 223-241, September 1976				
			$\frac{1}{1}$			
			\downarrow			
	_		+			

Examiner	-	Date	
Signature		Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.